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polyhydroxy, dihydroxy, carboxyl, lactam and amide, sulphon, sulphoxy, phosphate, and MEA.

Remarks

1. Status of the Claims

Claims 1-11 are pending in the present application. Claims 1 and 9 are the independent claims.

2. Rejection Under 35 USC § 112

The rejection under this section of the United States Code is believed to be moot in view of the amendment to claims 3 and 4. Withdrawal of this rejection is respectfully requested.

3. Claim Objections

The objections to claims 1, 7 and 11 are believed to be moot in view of the present amendment thereto. Withdrawal of these rejections is respectfully requested.

4. Rejection Under 35 USC § 103(a)

Claims 1-11 were rejected under 35 USC § 103(a) as being unpatentable over various references taken in combination with *Jonas, et al.* (U.S. Patent 5,766,515). For the reasons set forth below, and while in no way acquiescing to that the references to *Holdcraft, et al.*, *Bortscheller, et al.*, *Tsumara, et al.* teach or suggest that which is asserted in the Office Action, or that these references are properly combined with *Jonas, et al.* as the Office Action suggests, for at least the reasons that follow, the rejection in view of *Jonas, et al.* is believed to be improper.

It is established that a *prima facie* case of obviousness requires that all of the elements be found in the prior art. Necessarily, if one element of the prior art is missing

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from the applied art, a *prima facie* case of obviousness cannot be established. Moreover, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is a teaching, suggestion or motivation to do so found in the references relied upon or in the knowledge generally available to one having ordinary skill in the art. However, hindsight is never an appropriate motivation for combining references and/or knowledge generally available to one having ordinary skill in the art. Accordingly, relying upon hindsight knowledge of an applicant's disclosure when the prior art does not teach nor suggest such knowledge results in the use of the invention as a template for its reconstruction.

Claim 1, includes the limitation of a relief structure that "...comprises a salt of a poly (3,4 oxygen-substituted thiophene) as electrically conductive material, wherein the relief structure (3) contains a polyacid salt of a poly-3,4-alkylenedioxythiophene..."

Similarly, claim 9 includes the limitation of "...forming a radiation-sensitive composition which contains a photochemical initiator and a salt of an anion of a polyacid and a poly-3,4-alkylenedioxythiophene,..."

As stated in the application as filed, the envisaged stable conductivity of the component (e.g., the relief structure) is achieved through the choice of specific electrically conductive salts of a specific group of poly (3,4-substituted thiophenes), which group of polythiophenes is hereinafter also called PEDOTs. The PEDOTs are assumed to have a relatively high conductivity – conductivities higher than 100 S/cm have been observed – which is considered to be related to the oxygen substitutions at the 3,4-positions. The oxygen substitutions appear to reduce the bandgap in the conducting polymer. Further, the oxygen substitutions do not interrupt the conjugation of the polymeric chain, as the oxygen substitutions have bonding molecular orbitals, which are oriented planar to the conjugation of the polymeric chain. (Please refer to Figs.1-2, and page 2, lines 12-24 of the application as filed for further details).

As can be readily appreciated, the 3,4 oxygen substitution is a beneficial characteristic of the invention of the presently discussed independent claims.

The disclosure of *Jonas, et al.* is drawn to mixtures of neutral polythiophenes and organic compounds. These are not the oxygen-substituted thiophenes set forth in claims 1

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and 9. As such, it is applicant's position that the reference to *Jonas, et al.* does not teach nor suggest that the salt of poly (3,4 oxygen-substituted thiophene) as recited in claim 1, or the salt of an anion of a polyacid and a poly-3, 4-alkylenedioxythiophene as set forth in claim 9. (Please refer to column 1, lines 25- 67 of the reference to *Jonas, et al.* for support for this assertion). Because at least one claimed element of each of these independent claims is neither taught nor suggested in the applied reference, this reference cannot be used to establish a *prima facie* case of obviousness as the Office Action asserts.

Accordingly, because *Jonas, et al.* do not teach nor suggest at least claimed elements discussed above, independent claims 1 and 9 and the claims that depend therefrom are believed to be allowable over the applied art. Allowance is earnestly solicited.

Conclusion

In view of the foregoing, withdrawal of all objections and rejections is respectfully requested. Allowance of all pending claims is earnestly solicited.

Except as otherwise stated in the previous Remarks, applicants note that each of the amendments have been made to place the claims in better form for U.S. practice or to clarify the meaning of the claims; not to distinguish the claims from prior art references, otherwise narrow the scope or comply with other statutory requirements. Moreover, Applicants reserve all rights they may have under the Doctrine of Equivalents.

In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact William S. Francos, Esq. (Reg. No. 38,456) at (610) 375-3513 to discuss these matters.

Permission is hereby given to charge the Deposit Account referenced below for the fee required for the additional independent claim. If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number 50-0238 for any additional fees under 37

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C.F.R. §1.16 or under 37 C.F.R. §1.17.

Respectfully submitted on behalf of:
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Marked Version Showing Changes to Amended Claims:

1. (Once Amended) An electronic component comprising an electrically conductive relief structure (3) on a surface of an electrically insulating substrate (2), which structure comprises a salt of a poly (3,4 oxygen-substituted thiophene) as electrically conductive material, [characterized in that:] wherein [-] the relief structure (3) contains a polyacid salt of a poly-3, 4-alkylenedioxythiophene, in which the alkylene_group is chosen from the group consisting of a methylene group, an 1,2-ethylene group, a 1,3-propylene group and a 1,2-cyclohexylene group, which groups are optionally substituted, and [-] the relief structure (3) comprises at least one electrode (32).

3. (Once Amended) An electronic component as claimed in Claim 1, characterized in that the relief structure (3) comprises neighboring tracks [(341, 351)] which lie at a distance of less than 10 μm from one another.

4. (Once Amended) An electronic component as claimed in Claim 3, characterized in that neighboring tracks [(341, 351)] form a pair of a source and a drain electrode [(34, 35)], at least one of which is fork-shaped, the source and the drain electrode being interdigitated.

7. (Once Amended) An electronic component as claimed in Claim 5, characterized in that the component comprises a field_effect transistor (1).

11. (Once Amended) A method as claimed in Claim 9 or 10, characterized in that the method comprises, after the developing step, the additional step of doping said relief structure with an organic compound containing a first functional group selected from polyhydroxy, dihydroxy, carboxyl, lactam and amide, sulphon, sulphony, phosphate, and [mca] MEA.